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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/856,973

05/30/2001

Kenichi Tomioka

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02/04/2003

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EXAMINER

SELLERS, ROBERT E

ART UNIT

PAPER NUMBER

1712

11

DATE MAILED: 02/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application No.

09/856,973

Applicant(s)

TOMIOKA ET AL.

Examiner

Robert Sellers

Art Unit

1712

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 27 January 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY [check either a) or b)]**

- a) ☒ The period for reply expires 4 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.  
2. ☒ The proposed amendment(s) will not be entered because:  
(a) ☒ they raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☒ they raise the issue of new matter (see Note below);  
(c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See the attachment.

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
5. ☒ The a) ☒ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See the attachment.  
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.  
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☒ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_.

Claim(s) objected to: \_\_\_\_\_.

Claim(s) rejected: 1-3 and 10-16.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

8. ☐ The proposed drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.  
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_.  
10. ☐ Other: \_\_\_\_\_

Robert Sellers  
Primary Examiner  
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The amendment after Final rejection filed January 27, 2003 (Paper No. 11) has been denied entry. The amendments to Table 2 on page 32 of the specification cannot be corroborated by the opinion of the inventor in the declaration filed January 27, 2003 (Paper No. 10) in the absence of reliance upon certified translations of Table 1 on page 14 of Japanese priority application no. 10-365947 and/or Table 1 on page 13 of Japanese priority application no. 10-365948, or the filing of substantiating laboratory pages under 37 CFR 1.132.

It cannot be ascertained whether Table 2 on page 32 reflects the examples in Table 1 of the priority applications because Table 2 contains Examples 5-8 (four examples) and Comparative Examples 6-10 (five examples) whereas Table 1 of the priority applications report Examples 1-3 (three examples) and Comparative Examples 1-4 (four examples).

Although the declaration establishes the translations for C<sub>11</sub>Z as 2-undecylimidazole and 2MZ-CNS as 1-cyanoethyl-2-methyl-imidazolium trimellitate (page 3), the opinion of the inventor that the C<sub>11</sub>Z utilized in Example 4 on page 25, line 20 should be the 2MZ-CNS shown in Table 1 on page 29 of the original specification cannot be verified without a certified translation of the appropriate portion of the Japanese priority document(s) supporting such a contention, or the filing of substantiating laboratory pages under 37 CFR 1.132.

The "cyanate compound (A)" defined in claim 1, lines 10 and 15; claim 2, line 4 (still containing the objectionable term "cyanate type compound"); claim 10, line 3; claim 11, line 16; claim 12, lines 2-3 and claim 16, line 2 does not correspond to the newly claimed "prepolymer of a cyanate compound" defined in independent claim 1, line 2 and independent claim 11, line 3, thereby lacking proper antecedent basis.

There is no evidence in the form of a sample calculation to support the contention that equivalent ratios of DER331L and HP7200H in Example 1 and Comparative Example 1, and Example 5 and Comparative Example 6 are equal.

The sole valid comparison in the table on page 5 of the declaration wherein the type and amounts of dicyclopentadiene epoxy resin HP7200H (specification, page 24, line 8) and bisphenol A epoxy resin DER331L (page 25, line 27) are held constant involves Example 5 vs. Experiment 1. However, the presence of 5 parts by weight of pyrogallol antioxidant in Example 5 could materially affect the results.

According to MPEP § 2144 under the heading "RATIONALE DIFFERENT FROM APPLICANT'S IS PERMISSIBLE", "It is not necessary that the prior art suggest the combination to achieve the same advantage or result discovered by applicant (*In re Linter*, 173 USPQ 560, CCPA 1972; and *In re Dillon*, 16 USPQ2d 1897, 1901, "it is not necessary in order to establish a *prima facie* case of obviousness that . . . there be a suggestion in or expectation from the prior art that the claimed compound or composition will have the same or a similar utility as one newly discovered by applicant.").

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Dershem (col. 8, line 42) teaches the incorporation of antioxidants into a formulation comprising a polycyanate ester, an epoxy resin, a metal catalyst and an imidazole epoxy curing catalyst for the purpose endemic to antioxidants of retarding deterioration by oxidation. Although the empirically uncorroborated reasons of improving insulating characteristics and galvanic corrosion resistance is not recited, the impetus to add an antioxidant to the compositions of Hefner, Jr. which is equivalent to Dershem with respect to the presence of a polycyanate ester, epoxy resin, an cobalt naphthenate metal catalyst is consistent with the objectives of Hefner, Jr.

Claims 1-3 and 10 are directed to a composition without any limitations pertaining to a use which would only address the ultimate intended utility even if included. The combined teachings of the references are relevant thereto regardless of the utilities.

Claims 11-13 and 16 drawn to a prepreg and claims 14 and 15 necessitating a metal foil-laminated plate and printed wiring board, respectively. The composition of Hefner, Jr. is applicable as a prepreg (col. 12, lines 52-57, i.e. fiber-reinforced laminate or composite). Japanese '741 reveals the use of prepreps prepared from epoxy resins as circuit boards. It is a matter of ordinary skill in the art to employ the prepreg of Hefner, Jr. prepared with the dicyclopentadiene epoxy resin of Japanese '741 or '615 or Namba et al. as a circuit board wherein the presence of the polycyanate ester provides improved heat resistance (Hefner, Jr., col. 1, lines 14-17).

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Monday to Friday from 9:30 to 6:00 EST

RS  
1/31/03ROBERT E.L. SELLERS  
PRIMARY EXAMINER